# **FINAL**

# **Environmental Assessment**

for the

Construction of a New Security
Forces Operations Facility
St Clair County
Scott Air Force Base, Illinois



Prepared By:
375th Civil Engineering Squadron
Environmental Management Flight
Scott Air Force Base, Illinois 62225-5035

July 14, 2004

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**Report Documentation Page** 

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# FINDING OF NO SIGNIFICANT IMPACT TO CONSTRUCT A SECURITY FORCES OPERATIONAL FACILITY SCOTT AIR FORCE BASE, ILLINOIS

Agency: United States Air Force, Headquarters, Air Mobility Command

Background: Pursuant to the President's CEQ regulations, {Title 40 Code of Federal Regulations (CFR) Parts 1500-1508}, the NEPA of 1969 {42 U.S.C. §4321, et seq.}, Air Force Instruction (AFI) 32-7061, and the Environmental Impact Analysis Process, as promulgated at 32 CFR Part 989, the U.S. Air Force conducted an EA of the potential consequences associated with the construction of a new Security Forces Operation Facility at Scott AFB, IL. The EA considered all potential natural resources, environmental, and cultural impacts of the construction of the Security Forces Facility (hereinafter, "Proposed Action") and listed alternatives, both as solitary actions and in conjunction with other proposed activities. This FONSI summarizes the results of this EA and provides the U.S. Air Force's rationale for the Proposed Action and alternatives.

**PROPOSED ACTION:** The Proposed Action includes constructing a 34,000 square feet building at Washington and South Drive. The new construction would be located in an area that is currently mowed turf grass. The existing Security Forces Squadron's administrative building and warehouse facility will be demolished once the new SFOF has been constructed.

Alternatives: Alternatives to the Proposed Action are the No-Action Alternative and Alternative A. Implementation of the No-Action Alternative does not alleviate the spatial problems at the administrative facility nor does it alleviate the equipment storage and maintenance problems at the Security Forces Squadron Warehouse. Implementation of Alternative A places the Security Forces Squadron in a remote portion of the base and would decrease the response time of the Squadron's personnel.

Cultural and Historical Resources: The Proposed Action site is located in an area where there are no existing facilities or structures. Historically, the site has been highly disturbed. No artifacts or historical objects are expected to be excavated during construction. In the unlikely event artifacts or historical objects are discovered, construction activities would cease until the Cultural Resources Specialist and Base Historian are notified and the appropriate action is accomplished.

Air Quality: Fugitive dust and construction vehicle exhaust would be generated during construction of the Proposed Action. However, these emissions would not constitute a major source of air pollutants based on quantitative analyses of particulate matter and vehicle emissions generated by projects of similar size and scope. The estimated values of direct and indirect emissions are below the *de minimus* thresholds specified at 40 CFR 93.153(b)(1). Therefore, the Proposed Action would not increase emissions over baseline emission levels. The Proposed Action would be in compliance with all relevant requirements and milestones contained in the Illinois State Implementation Plan; therefore, a conformity determination would not be necessary.

Hazardous Materials and Waste: The use of hazardous materials during construction activities would be limited and generation of hazardous waste would not be anticipated from the Proposed

Action. There would be no anticipated impact to human health or the environment during construction activities or from activities carried out at the SFOF.

**Noise:** Some noise impacts would occur during the construction of the Proposed Action. The amount of noise generated from operational activities would be temporary and negligible.

Geology and Soils: The surface area would be considerably disturbed by construction activities at the Proposed Action; however, construction would not negatively affect surface or geological resources. Necessary measures and best management practices would be utilized to prevent soil erosion during and after construction activities.

Water Resources: There would be no significant impacts to surface or ground water quality during construction of the Proposed Action.

Occupational Safety and Health: If the Proposed Action is implemented, no unfavorable impacts to occupational health and safety are projected. A positive impact to Security Forces personnel is expected.

**Biological Resources:** No biological resources, including endangered or threatened species, or rare fauna and flora inhabit the Proposed Action area. As such, no impacts are probable.

**Ordnance:** There are no issues regarding the storage or use of ordnance at or near the Proposed Action; therefore, no impact is anticipated.

Environmental Justice: There would be no disproportionately high or adverse impact on minority or low-income populations as a result of the Proposed Action.

**Indirect and Cumulative Impacts:** No impacts are anticipated from site-specific, direct, indirect, or cumulative impacts associated with the Proposed Action.

Relationship Between Short-term Uses and Enhancement of Long-Term Productivity: Implementation of the Proposed Action could have a positive effect on long-term productivity by providing Security Forces personnel with a comfortable and efficient work environment.

Irreversible and Irretrievable Commitment of Resources: There would be minor irreversible and irretrievable commitment of resources if the Proposed Action were selected. Military funds would be permanently expended, building materials would be permanently committed for construction, and the area proposed for new construction would be a long-term commitment of resources. However, the overall impact would be considered inconsequential.

Unavoidable Adverse Impacts: There would be no major unavoidable adverse impacts associated with the Proposed Action.

FINDING OF NO SIGNIFICANT IMPACT: Based upon my review of the facts and analyses contained in the attached Environmental Assessment for the Construction of a new SFOF dated July 14, 2004, I conclude that implementation of the Proposed Action would not have a considerable impact, either by itself or cumulatively with other projects at Scott AFB. Accordingly, the requirements of NEPA, the CEQ regulations, and 32 CFR 989 are fulfilled and an Environmental Impact Statement is not required. The signing of this Finding of No Significant Impact completes the environmental impact analysis process under Air Force Regulations.

Shelley D. Christian, Colonel, USAF

Acting EPC Chairperson

20 Sep 04

Attachment:

**Environmental Assessment** 

# TABLE OF CONTENTS

SECT	PAGE
EXEC	CUTIVE SUMMARYES-1
1.0	PURPOSE OF AND NEED FOR THE PROPOSED ACTION1-1
1.1	INTRODUCTION1-1
1.2	NEED FOR ACTION1-1
1.3	OBJECTIVE1-1
1.4	SCOPE OF THE EA1-3
1.5	DECISION(S) THAT MUST BE MADE1-3
1.6	APPLICABLE REGULATORY REQUIREMENTS AND REQUIRED COORDINATION
2.0	DESCRIPTION OF THE ALTERNATIVES INCLUDING THE PROPOSED ACTION
2.1	INTRODUCTION2-1
2.2	SELECTION CRITERIA FOR ALTERNATIVES
2.3	DESCRIPTION OF PROPOSED ALTERNATIVES2-1
2.4	DESCRIPTION OF PAST AND REASONABLY FORESEEABLE FUTURE ACTIONS RELEVANT TO CUMULATIVE IMPACTS2-2
2.5	IDENTIFICATION OF PREFERRED ALTERNATIVE2-2
3.0	AFFECTED ENVIRONMENT
3.1	INTRODUCTION3-1
3.2	AIR QUALITY
3.3	NOISE
3.4	WASTES, HAZARDOUS MATERIALS, AND STORED FUELS3-2
3.5	WATER RESOURCES - FLOODPLAINS AND WETLANDS3-4
3.6	BIOLOGICAL RESOURCES
3.7	SOCIOECONOMIC RESOURCES
3.8	CULTURAL RESOURCES
3.9	LAND USE3-10
3.10	TRANSPORTATION SYSTEMS3-10
3.11	AIRSPACE/AIRFIELD OPERATIONS3-12
3.12	SAFETY AND OCCUPATIONAL HEALTH3-12

# TABLE OF CONTENTS

SECT		PAGE
3.13		
3.14	GEOLOGY AND SOILS	3-13
3.15	ENVIRONMENTAL JUSTICE	3-13
3,16	INDIRECT AND CUMULATIVE IMPACTS	3-13
4.0	ENVIRONMENTAL CONSEQUENCES	4-1
4.1	INTRODUCTION	4-1
4.2	AIR QUALITY	4-2
	4.2.1 Proposed Action and Alternative A	
	4.2.2 No-Action Alternative	4-2
4.3	NOISE	4-2
	4.3.1 Proposed Action and Alternative A	
	4.3.2 No-Action Alternative	4-3
4.4	WASTES, HAZARDOUS MATERIALS AND STORED FUELS	4-3
	4.4.1 Proposed Action and Alternative A	4-3
	4.4.2 No-Action Alternative	4-3
4.5	WATER RESOURCES	4-3
	4.5.1 Proposed Action and Alternative A	4-3
	4.5.2 No-Action Alternative	4-4
4.6	BIOLOGICAL RESOURCES	4-4
	4.6.1 Proposed Action and Alternative A	4-4
	4.6.2 No-Action Alternative	4-4
4.7	SOCIOECONOMICS	4-4
	4.7.1 Proposed Action and Alternative A	4-4
	4.7.2 No-Action Alternative	4-4
4.8	CULTURAL RESOURCES	4-5
	4.8.1 Proposed Action and Alternative A	
	4.8.2 No-Action Alternative	4-5
4.9	LAND USE	4-5
	4.9.1 Proposed Action and Alternative A	
	4.9.2 No-Action Alternative	4-5
4.10	TRANSPORTATION SYSTEMS	4-5
	4.10.1 Proposed Action and Alternative A	4-5
	4.10.2 No-Action Alternative	
4.11	AIRSPACE/AIRFIELD OPERATIONS	4-6
	4.11.1 Proposed Action and Alternative A	
	4.11.2 No-Action Alternative	

# TABLE OF CONTENTS

SECT		PAGE
4.12	4.12.1 Proposed Action and Alternative A	4-6
	4.12.2 No-Action Alternative	4-6
4.13		
	4.13.1 Proposed Action and Alternative A	
	4.13.2 No-Action Alternative	4-7
4.14		
	4.14.1 Proposed Action and Alternative A	
	4.14.2 No-Action Alternative	4-8
4.15		
	4.15.1 Proposed Action and Alternative A	
	4.15.2 No-Action Alternative	4-8
4.16	INDIRECT AND CUMULATIVE IMPACTS	4-8
	4.16.1 Proposed Action and Alternative A	
	4.16.2 No-Action Alternative	4-8
4.17	UNAVOIDABLE ADVERSE IMPACTS	4-8
	4.17.1 Proposed Action and Alternative A	
	4.17.2 No-Action Alternative	4-8
4.18	SUMMARY TABLE OF ENVIRONMENTAL CONSEQUENCES	4-9
5.0	REFERENCES	5-1
5.0	LIST OF PREPARERS	6-1
7.0	PERSONS CONTACTED	7-1

# LIST OF TABLES

NUMBER		PAGE
Table 4-1	Description of Environmental Consequences	4-1
Table 4-2	Comparison of Environmental Consequences	
	LIST OF FIGURES AND MAPS	
NUMBER		PAGE
Figure 1-1	Project Location	1-2
Figure 1-2	Site Location Map	1-4
Figure 3-1	Operational Constraints	
Figure 3-2	Wetlands and Floodplains	
Figure 3-3	Archeological Potential at Scott Air Force Base	
Figure 3-4	Historic District	
Figure 3-5	Future Land Use	
	LIST OF APPENDICES	

- A Air Force DD Form 1391
- B Site Photographs

#### LIST OF ABBREVIATIONS AND ACRONYMS

ACM asbestos-containing materials

AFB Air Force Base
AFI Air Force Instruction
AFMAN Air Force Manuals

AICUZ Air Installation Compatible Use Zone

AMC Air Mobility Command

AOC areas of concern
BGP Base General Plan

BMP best management practices

CAA Clean Air Act

CAAA Clean Air Act Amendments

CEQ Council on Environmental Quality

CES/CEV Civil Engineering Squadron/Civil Environmental Flight

CFR Code of Federal Regulation

dB decibels

DESC Defense Energy Support Center DoDI Department of Defense Instruction

EA Environmental Assessment

EM Engineer Manual

EMF Environmental Management Flight

EO Executive Order

EPC Environmental Protection Committee

EPCRA Emergency Planning and Community Right to Know Act

FAA Federal Aviation Administration

FEMA Federal Emergency Management Agency

FIP Federal Implementation Plan FONSI Finding of No Significant Impact

gpm gallons per minute

IEPA Illinois Environmental Protection Agency
IESPB Illinois Endangered Species Protection Board

IRP Installation Restoration Program

LBP lead-based paint
MGD million gallons per day
MSDS Material Safety Data Sheet

NAAQS National Ambient Air Quality Standard NEPA National Environmental Policy Act

NPDES National Pollutant Discharge Elimination System

NRCS Natural Resources Conservation Service

OSHA Occupational Safety and Health Administration

P2 pollution prevention PCB polychlorinated biphenyl

RCRA Resource Conservation and Recovery Act

ROI Region of Influence

# LIST OF ABBREVIATIONS AND ACRONYMS (Cont'd)

**SFOF** Security Forces Operations Facility State Historic Preservation Office SHPO

SIP State Implementation Plan

Standard Metropolitan Statistical Area **SMSA** 

Technical Orders TO

**UFC** Unified Facilities Criteria United States Air Force USAF

United States Environmental Protection Agency **USEPA** 

> FINAL vi

# **EXECUTIVE SUMMARY**

The 375<sup>th</sup> Civil Engineer Squadron at Scott Air Force Base, Illinois proposes to construct a new Security Forces Operations Facility (SFOF) located at South Drive and Washington Street, at Scott Air Force Base (AFB) in Illinois. The SFOF is undergoing a Proposed Action to construct a facility capable of consolidating and supporting the Security Forces mission and improve the efficiency and effectiveness of the operations.

This Environmental Assessment (EA) has been prepared in accordance with the *National Environmental Policy Act of 1969* (NEPA), the Council on Environmental Quality regulations [40 Code of Federal Regulations, sections 1500-1508], and Air Force Instruction 32-7061, the Environmental Impact Analysis Process, as promulgated at 32 CFR 989. This EA focuses on specific issues and concerns of the Proposed Action and the alternatives that could affect the environment of Scott AFB and the surrounding properties. The range of alternatives includes taking No Action, implementing the Proposed Action, or implementing Alternative A.

The footprint of the new facility would be approximately 34,000 square feet of property that is currently serving as a mowed turf grass area. Situated in southwestern Illinois, Scott AFB is located approximately 20 miles east of St. Louis, Missouri.

ES-1 FINAL

## 1.0 PURPOSE OF AND NEED FOR THE PROPOSED ACTION

#### 1.1 INTRODUCTION

The Proposed Action and Alternative A are located at Scott Air Force Base (AFB) in St. Clair County, Illinois which is appoximately 20 miles east of St. Louis, Missouri. The base comprises approximately 2,500 acres and is located in a predominantly agricultural area. The base is immediately south of Interstate Highway 64, near the cities of O'Fallon and Belleville (Figure 1-1).

Base security is provided by the Security Forces Squadron, whose mission is to provide combat capable forces, trained and equipped to defend Air Force assets, at home and deployed locations, against all enemies, and to maintain community-based law and order and quality of life issues through continuous process improvement and proactive actions.

The 375<sup>th</sup> Security Forces Squadron operates at two segregated locations on the installation. Readiness equipment to support nine unit type code requirements and mission support supplies are stored in a 1941 warehouse facility. The mechanical systems (e.g. air conditioning) at this facility cannot provide a suitable environment for the upkeep and storage of the equipment. Workers at the facility are forced to adjust their work schedule to compensate for the lack of environmental control, sometimes working from 0400 to 1200 to avoid heat during the summer.

The main administrative facility for the 375<sup>th</sup> Security Forces Squadron was constructed in 1953 and does not meet the current needs of the Squadron. Security Force personnel must escort prisoners to the base gym for exercise because the confinement area does not have the required space. This draws manpower away from the prisoner unit. The existing interview room doubles as a detention cell and is often damaged by the prisoners. The confinement cells are located such that prisoners must be led through the administrative and customer service areas of the building and directly across from the office of investigations, allowing potential encounters between prisoners and their victims and/or witnesses. Overall, the poor state of both facilities and the lack of necessary spatial requirements have forced the personnel to develop workarounds, decreasing the effectiveness of operations.

#### 1.2 NEED FOR ACTION

Without the Proposed Action, daily operations of the 375<sup>th</sup> Security Forces Squadron will continue to be hindered by the segregation of Security Forces and the inefficiencies of the administrative building. The unit's ability to rapidly support Aerospace Expeditionary Force requirements with properly equipped unit type codes will deteriorate as equipment continues to be exposed to the elements.

#### 1.3 OBJECTIVE

The objective of this Environmental Assessment (EA) is to evaluate the potential impacts associated with the implementation of the Proposed Action, Alternative A, and the No-Action Alternative and to determine the significance of those impacts. If the potential impacts are not considered significant, a Finding of No Significant Impact (FONSI) will be prepared.

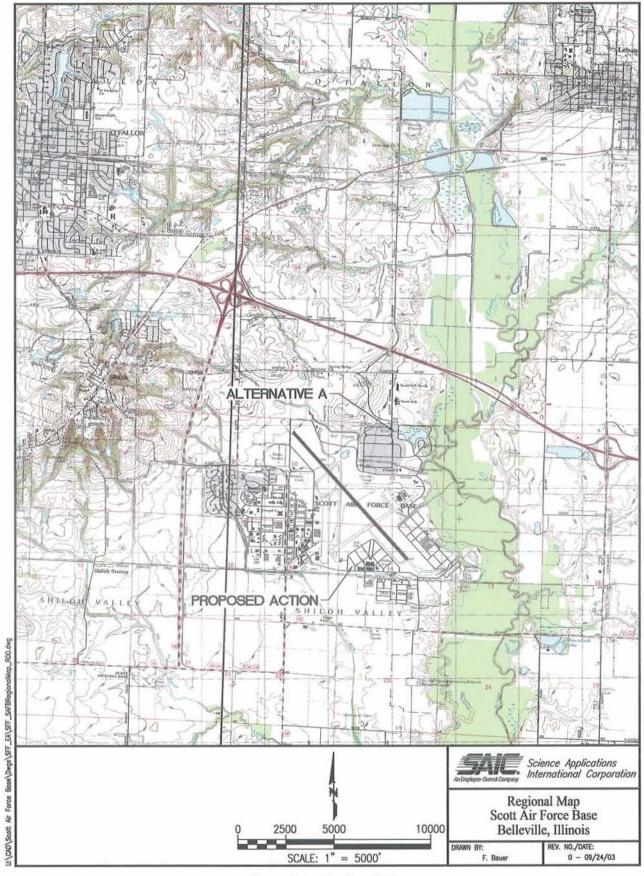


Figure 1-1. Regional Map

## 1.4 SCOPE OF THE EA

This EA identifies, describes, and evaluates the potential environmental impacts associated with implementation of the Proposed Action, Alternative A, and the No-Action Alternative. Furthermore, this document includes an analysis of the impacts of the Proposed Action, Alternative A, and the No-Action Alternative as they relate to the following environmental and socioeconomic programs:

- Air Quality
- Noise
- Wastes, Hazardous Materials/Stored Fuel
- Land Use
- Safety and Occupational Health
- Water Resources
- · Floodplains and Wetlands
- Biological Resources
- Environmental Management
- Geology and Soils
- Socioeconomics
- Cultural Resources
- Transportation
- Airspace/Airfield Operations
- Pollution Prevention
- Environmental Justice

# 1.5 DECISION(S) THAT MUST BE MADE

The decision to be made will include selecting one of the alternatives described as follows:

**Proposed Action:** This alternative consists of the construction of a new 34,000-square-foot Security Forces Operations Facility (SFOF) located at Washington and South Drive (Figure 1-2). The addition will consolidate existing Security Forces operations into a single facility in order to improve the efficiency and effectiveness of the operations.

Alternative A: This alternative consists of the construction of a new 34,000-square-foot SFOF located near the Cardinal Creek Gate and adjacent to Pryor Drive (Figure 1-2). The addition will consolidate existing Security Forces operations into a single facility in order to improve the efficiency and effectiveness of the operations.

No-Action Alternative: The SFOF would remain status quo with this alternative. The No-Action Alternative would not meet the needs of the current Security Forces Squadron and would not allow the squadron to operate in an efficient and safe manner.

Upon review of this document, the 375<sup>th</sup> Airlift Wing Environmental Protection Committee (EPC) Chairperson at Scott AFB will decide which alternative to implement.

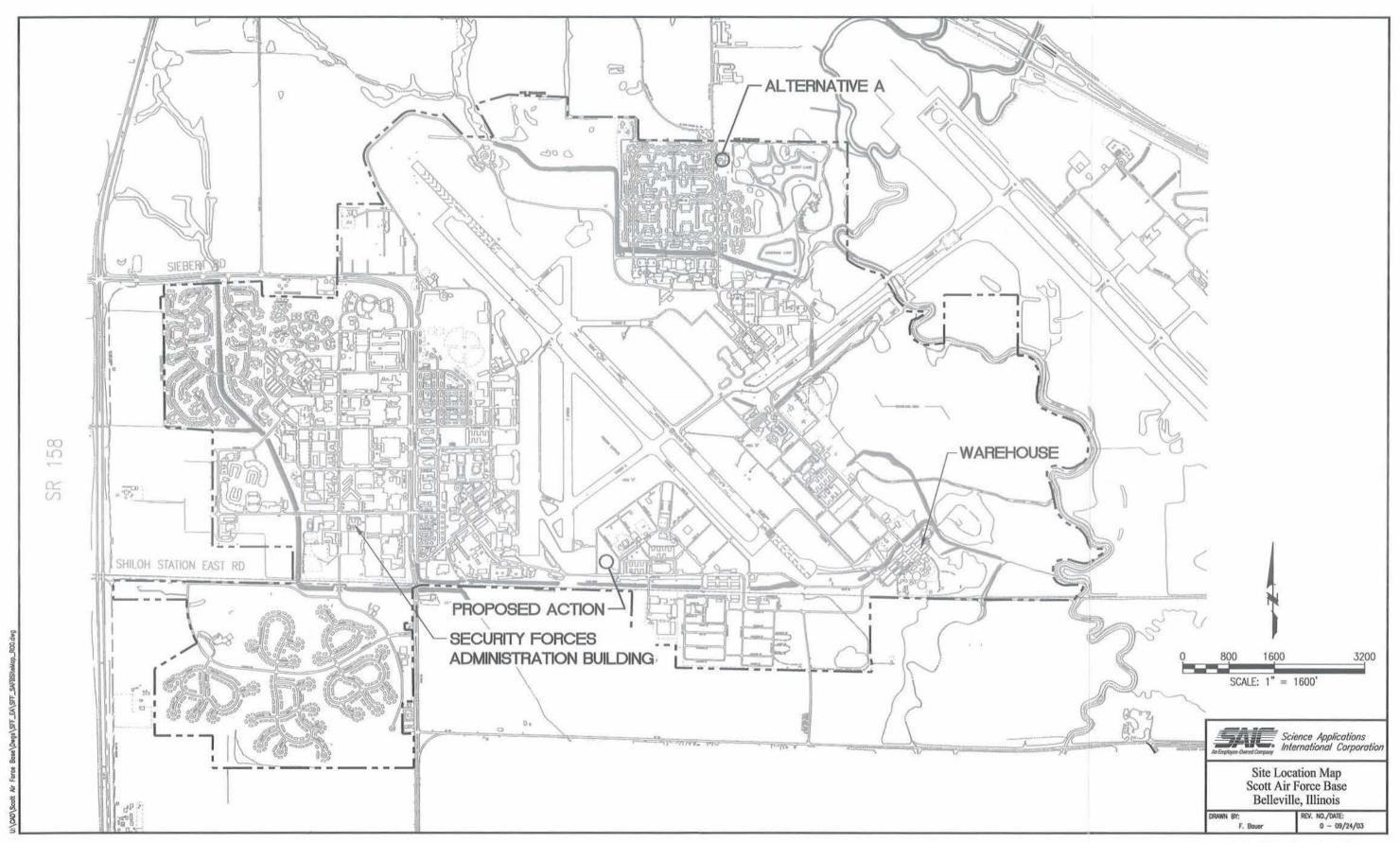


Figure 1-2. Site Location Map

# 1.6 APPLICABLE REGULATORY REQUIREMENTS AND REQUIRED COORDINATION

Following is a list of Air Force Instructions (AFI), Executive Orders (EO), Acts, Air Force Manuals (AFMAN), Engineer Manual (EM), Code of Federal Regulations (CFR), Department of Defense Instructions (DoDI), and Technical Orders (TO) that are applicable to the Proposed Action.

- National Environmental Policy Act, Public Law 91-190, 42 U.S.C. 4321-4347, January 1, 1970;
- Council on Environmental Quality (CEQ) regulations, 40 CFR parts 1500 through 1505;
- EO 11988 and 11990, Floodplain Management and Protection of Wetlands;
- EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations;
- Clean Air Act (1970, Amended 1990);
- Corps of Engineers Manual, EM 385-1-1, General Safety Requirements;
- 32 CFR, Part 989, Environmental Impact Analysis Process;
- AFI 32-7062, Air Force Comprehensive Planning;
- AFI 32-7064, Natural Resources Management;
- AFI 32-7065, Cultural Resources Management;
- DoDI 4165.57 and AFI 32-7063, AICUZ Programs;
- · 29 CFR, Occupational Safety and Health Standards;
- AFMAN 32-1123, Unified Facilities Guide;
- AFH 32-1084 Civil Engineer Facility Requirements;
- 40 CFR 93.153, Air Conformity Determination;
- Resource Conservation Recovery Act (RCRA) 1970.

In addition to this list, coordination with regulatory agencies is discussed below.

The State Historic Preservation Office (SHPO) is not typically notified of new construction, unless the project involves the demolition or alteration of a historical building or structure.

Based upon the information contained in the Archeological Assessment of Scott Air Force Base report and the Thomason and Associates Inventory and Evaluation of Historic Buildings conducted in 1992, the Proposed Action would not affect historical or cultural resources; therefore, SHPO approval would not be required prior to construction.

If one of the construction alternatives is implemented, the Illinois Environmental Protection Agency (IEPA) would determine the permit requirements that are pursuant to the Illinois Pollution Control Board Rules and Regulations. Additional permits may be required for activities such as construction or extensions of sanitary/storm sewers and water mains, and other related activities. In addition to the aforementioned requirements and prior to construction, a Digging Permit, AF Form 103, (Base Civil Engineering Work Clearance Request) is required under AFI 32-1031 and Illinois Underground Utility Facilities Damage Prevention Act, Public Act 86-0674, amended 88-0681 and AFI 32-1031. This section is not all-inclusive, as environmental regulations and standards are frequently modified.

During implementation of one of the construction alternatives, the 375<sup>th</sup> Civil Engineering Squadron/Civil Environmental Flight (CES/CEV) (Environmental Management Flight [EMF]) would be notified immediately if an action or activity were observed that could adversely affect human health and/or the environment. This organization would take immediate action to correct the condition or contact IEPA for further guidance, if necessary. Best management practices are encouraged throughout the construction process.

1-6 FINAL

# 2.0 DESCRIPTION OF THE ALTERNATIVES INCLUDING THE PROPOSED ACTION

### 2.1 INTRODUCTION

This section describes the selection criteria for alternative sites, details of the Proposed Action, Alternative A, and the No-Action Alternative, and past and reasonably foreseeable future actions relevant to cumulative impacts.

# 2.2 SELECTION CRITERIA FOR ALTERNATIVES

- 1) Minimum impact to the environment
- 2) Facility must be capable of supporting the consolidated Security Forces Personnel
- 3) Facility must meet requirements for equipment maintenance and storage
- 4) Facility must meet long-term development plans
- 5) Facility must meet the Base General Plan (BGP) provisions
- 6) Facility must meet spatial requirements and enhance safety
- Facility should be located on the base in an area that allows the facilitation of the mission of the Security Forces Squadron

Alternatives considered for this EA include the Proposed Action, Alternative A, and No Action.

The Proposed Action was selected based upon the ability to meet the selection criteria listed above. The action is compatible with the May 2002 BGP (Woolpert, 2002). The BGP illustrates Scott AFB's present and future capability to support its mission. The BGP is a stand-alone document responding to the Air Force's commitments to planning for future development and protecting the environment, as prescribed in the AFI 32-7062, Air Force Comprehensive Planning.

### 2.3 DESCRIPTION OF PROPOSED ALTERNATIVES

No-Action Alternative

The current Security Operations buildings (Building 1970, Building 3276) would remain status quo with the No-Action Alternative.

## Alternative A

Alternative A includes constructing a 34,000-square-foot, one-story masonry facility built on a reinforced concrete slab with brick veneer exterior treatment, sloped, raised-seam metal roof system, mechanical equipment room, storage area, lighted parking, landscaping, and all utilities

and necessary support associated with the project. Included are security and fire detection/suppression systems. Construction would occur at a mowed turf grass area located near Scott Pryor Drive and Gray Plaza Road. Alternative A would also include the demolition of the existing Security Forces administration and warehouse facilities.

# 2.4 DESCRIPTION OF PAST AND REASONABLY FORESEEABLE FUTURE ACTIONS RELEVANT TO CUMULATIVE IMPACTS

There are no known actions, either in the past or in the reasonably foreseeable future, that would be relevant to cumulative impacts.

# 2.5 IDENTIFICATION OF PREFERRED ALTERNATIVE

The preferred alternative, referred to as the Proposed Action, includes constructing a 34,000-square-foot, one-story masonry facility built on a reinforced concrete slab with brick veneer exterior treatment, sloped, raised-seam metal roof system, mechanical equipment room, storage area, lighted parking, landscaping, and all utilities and necessary support associated with the project. Included are security and fire detection/suppression systems. Construction would occur at a mowed turf grass area located at Washington and South Drive. The Proposed Action also includes the demolition of the existing Security Forces administration and warehouse facilities.

### 3.0 AFFECTED ENVIRONMENT

#### 3.1 INTRODUCTION

This section describes the environmental components that could be affected by the construction and operation of the Proposed Action, Alternative A, and the No-Action Alternative. Section 3.0 serves as a baseline for evaluating the environmental status of the Proposed Action, Alternative A, and the No-Action Alternative. Additionally, this EA addresses the following environmental issues:

- · Air Quality;
- · Noise:
- Wastes, Hazardous Materials, and Stored Fuels;
- Water Resources, to include Floodplains and Wetlands;
- Biological Resources;
- Socioeconomic Resources;
- Cultural Resources;
- Land Use;
- Transportation Systems;
- Airspace/Airfield Operations;
- · Safety and Occupational Health;
- Environmental Management, Pollution Prevention, and Geology and Soils;
- Environmental Justice;
- Indirect and Cumulative Impacts.

The aforementioned issues are not listed in order of significance.

### 3.2 AIR QUALITY

Scott AFB is in the St. Louis Standard Metropolitan Statistical Area (SMSA). Although the East St. Louis ozone monitoring station reflects compliance with the standard, the St. Louis SMSA has been designated by the United States Environmental Protection Agency (USEPA) as a non-attainment area for ozone.

The Clean Air Act (CAA) (42 USC 7401 et seq., as amended) established a number of programs and permitting processes designed to protect and improve air quality. Section 176(c) of the Clean Air Act Amendment (CAAA) of 1990, 42 USC, Section 7506(c), establishes a conformity requirement for federal agencies which has been implemented by regulation, 40 CFR Part 93, Subpart B. There are no air quality issues associated with the areas selected for the Proposed Action or Alternative A.

The construction dates for the existing Security Forces administrative building (1953) and the existing Security Forces warehouse (1941) were before the use of lead-based paints (LBP) and before asbestos-containing materials (ACM) were restricted for construction uses. It is likely that one or both buildings contain ACM or LBP and it is recommended that a survey for these materials be conducted before either structure is demolished.

## 3.3 NOISE

DoDI 4165 establishes and requires military departments to develop, implement, and maintain an Air Installation Compatible Use Zone (AICUZ) program for installations with flying operations. AFI 32-7063, AICUZ Program sets forth the policy, responsibilities, and requirements of the program. Topics covered include program objectives, responsibilities, land use compatibility guidelines, and AICUZ studies and updating. This program is designed to provide information on flight operations and compatibility guidelines to local planners to help them mitigate the noise impacts of military aircraft operations. The AICUZ program uses information on aircraft types, flight patterns, power settings, numbers of operations, and time of day or night to estimate average busy-day noise levels. This estimation is accomplished by using the NOISEMAP computer model and the results are expressed in terms of the day-night average sound level. Noise level contours based on the computer noise model NOISEMAP indicate the noise levels at the location of the proposed SFOF to be 65 to 70 decibels (dB) (Figure 3-1). According to the Federal Aviation Administration (FAA), no restrictions apply to office buildings in areas with noise levels below 70 dB (14 CFR 150). Noise level contours at the location of Alternative A are below 65 dB. According to the FAA, no restrictions apply to areas with noise levels below 65dB (14 CFR 150). The FAA also requires analysis of noise impacts for certain projects involving civil airports expressed in the same terms (FAA Order 5050.4A). Noise standards are also addressed in Occupational Safety and Health Administration (OSHA) standards and implemented by regulation 29 CFR 1910.95. The Department of Labor administers these regulations, which are applicable at construction sites and buildings at Scott AFB.

Ambient noise sources in the vicinity of the location of the Proposed Action include aircraft from the flightline, noise from the engine testing facility (Building 742), trains passing on the railroad track located to the south, and normal vehicular traffic on the streets surrounding the proposed SFOF.

Ambient noise sources in the vicinity of the location of Alternative A include normal vehicular traffic on the streets surrounding the site and noise from the nearby kennels.

# 3.4 WASTES, HAZARDOUS MATERIALS, AND STORED FUELS

The Resource Conservation and Recovery Act (RCRA) established statutory requirements that serve as the basis of the hazardous waste regulations. These regulations are found at 40 CFR 260-279. Corresponding state regulations identifying and listing hazardous wastes and standards applicable to generators of hazardous wastes are found at 35 IAC 721-722. Hazardous chemicals and materials are defined in 29 CFR 1900.1200. Legal requirements regarding emergency planning and reporting of hazardous and toxic chemicals are noted in the Emergency Planning and Community Right to Know Act (EPCRA). Scott AFB has an active Installation Restoration Program (IRP). A review of IRP records indicated that no IRP sites or Areas of Concern (AOC) are known to exist at or near the locations of the Proposed Action or Alternative A.

3-2 FINAL

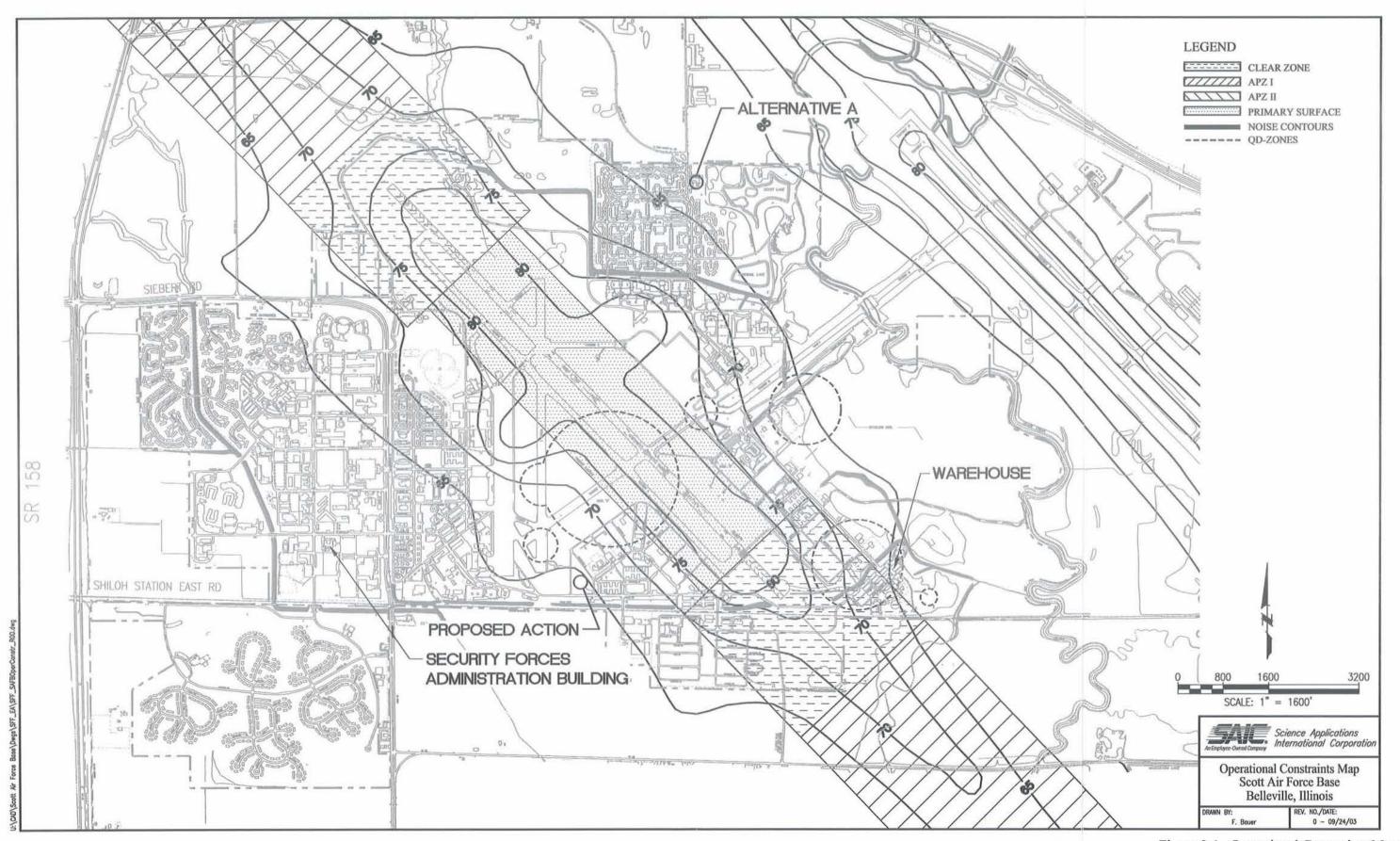


Figure 3-1. Operational Constraints Map

### 3.5 WATER RESOURCES - FLOODPLAINS AND WETLANDS

The Clean Water Act regulates water quality. These regulations are found at 40 CFR, Subchapter D. Scott AFB is situated in an area of southwestern Illinois that lacks aquifers of regional significance. Precipitation is the primary source of groundwater recharge in the project area. Most communities in St. Clair County, including Scott AFB and several communities in the Granite City area in Madison County, obtain their water from the Mississippi River through the Illinois-American Water Company.

Ash Creek and Silver Creek are drainage points at Scott AFB. Ash Creek originates approximately one mile northwest of the base near Shiloh, Illinois. From its origin, Ash Creek flows through the base and abuts the rear of the existing commissary before discharging into Silver Creek. The creek typically has steep mud banks, low stream gradient, and turbid water. The watershed comprises primarily farmland. Scott AFB is also drained by overland flow to diversion structures, field tiles, storm sewers, drainage ditches, and culverts. About 60 percent of the base is drained by Silver Creek and the remaining area is drained by Ash Creek (Woolpert, 2002).

An on-site sewage treatment plant serves Scott AFB with a capacity of two million gallons per day (mgd). The sewage flow averages about 1.45 mgd. The plant provides tertiary treatment, and the effluent is discharged to a tributary of Silver Creek at the southeast part of the base (Woolpert, 2002). Construction of the new SFOF is not expected to increase input into the sewage treatment system, as there will not be an increase in jobs or personnel at the new facility. The new SFOF will be staffed with existing Security Forces personnel.

The Clean Water Act, noted earlier in this section, sets the basic structure that regulates discharges and dredged materials that could enter wetlands. There are many other laws and regulations, such as the Federal Agriculture Improvement and Reform Act, the North American Wetlands Conservation Act, and the Endangered Species Act, that are applicable to wetlands protection. By definition, wetlands are transitional lands between terrestrial and aquatic systems where the water table is usually at the surface or the land is covered by shallow water. Wetlands generally include swamps, marshes, bogs, and similar areas. Per the Federal Interagency Committee on Wetland Delineation (1989), jurisdictional wetlands are those that are found to contain:

- Hydrophytes (plants that grow in water or on soils periodically deficient in oxygen due to inundation by water);
- Hydric soils (soils that are saturated, ponded, or flooded long enough to produce anaerobic conditions);
- Wetland hydrologic conditions (permanent or periodic inundation or soil saturation to the surface).

Executive Order 11988 of May 24, 1977, entitled "Floodplain Management" defines a floodplain and establishes a policy of avoiding impacts to floodplains when practicable. Facility design and construction, real property acquisition, maintenance activities, real property disposal, and natural resource program implementation actions must comply with EO 11988. The basis for this guidance includes the *Clean Water Act* of 1977, 33 U.S.C. 1251 et seq., *National Environmental Policy Act of 1969*, (NEPA), 42 USC 4321. et. seq., the *National Flood Insurance Act of 1968*, 42 USC 4001, et seq., the *Flood Disaster Protection Act of 1973*, and Public Law 93-235, 87 Statute 975. Based upon a review of the 1985 Federal Emergency Management Agency (FEMA) 100-year floodplain map, neither the site of the Proposed Action nor the site of Alternative A was found to be located within a floodplain (Figure 3-2). A site visit and a review of the BGP's natural resource areas confirmed that neither the Proposed Action nor the Alternative A site included any wetlands (Woolpert, 2002).

Pennsylvanian bedrock underlies Scott AFB at a depth of approximately 85 feet. Underlying the Pennsylvanian bedrock is the Chesterian Series sandstone. Wells in this sandstone yield 20 to 50 gallons per minute (gpm). Other aquifers in the vicinity of the base include alluvial aquifers located along Silver Creek. Yields from these aquifers are too low for use as potable water or for irrigation (Woolpert, 2002).

#### 3.6 BIOLOGICAL RESOURCES

Air Force Instruction 32-7064, Integrated Natural Resources Management, and the *Endangered Species Act* address biological resources. No plants listed as endangered by the Illinois Endangered Species Protection Board (IESPB) were found within the study site during botanical surveys conducted on September 19, 2001. Although no botanical endangered species were discovered, suitable habitat does exist for both state and federally listed species within the Scott AFB boundaries.

A single federally endangered Indiana bat (*Myotis sadalis*) was captured during a study conducted by personnel from the U.S. Engineer Research and Development Center in July 2001. The Indiana bat was identified along Silver Creek near the confluence of Carolina Creek (USAERDC, 2002). Although suitable habitat for the Indiana bat is found at Scott AFB, none exists in the vicinity of the Proposed Action or Alternative A.

State threatened or endangered animal species identified at Scott AFB include the brown creeper, red-shouldered hawk, and little blue heron. Due to low numbers of brown creepers and significant loss of floodplain forest habitat, the state of Illinois (State of Illinois, 2001) considers the brown creeper a threatened species. The state threatened red-shouldered hawk was detected within the boundaries of Scott AFB during the 2001 bird survey (State of Illinois, 2001). The red-shouldered hawk is typically found in riparian floodplain forests with mature hardwood trees. The presence of a little blue heron (state endangered) was also incidentally noted during the 2001 bird survey. The endangered and threatened species specified in this document are not present at the sites of the Proposed Action or Alternative A, nor does any suitable habitat for these species exist at either site.

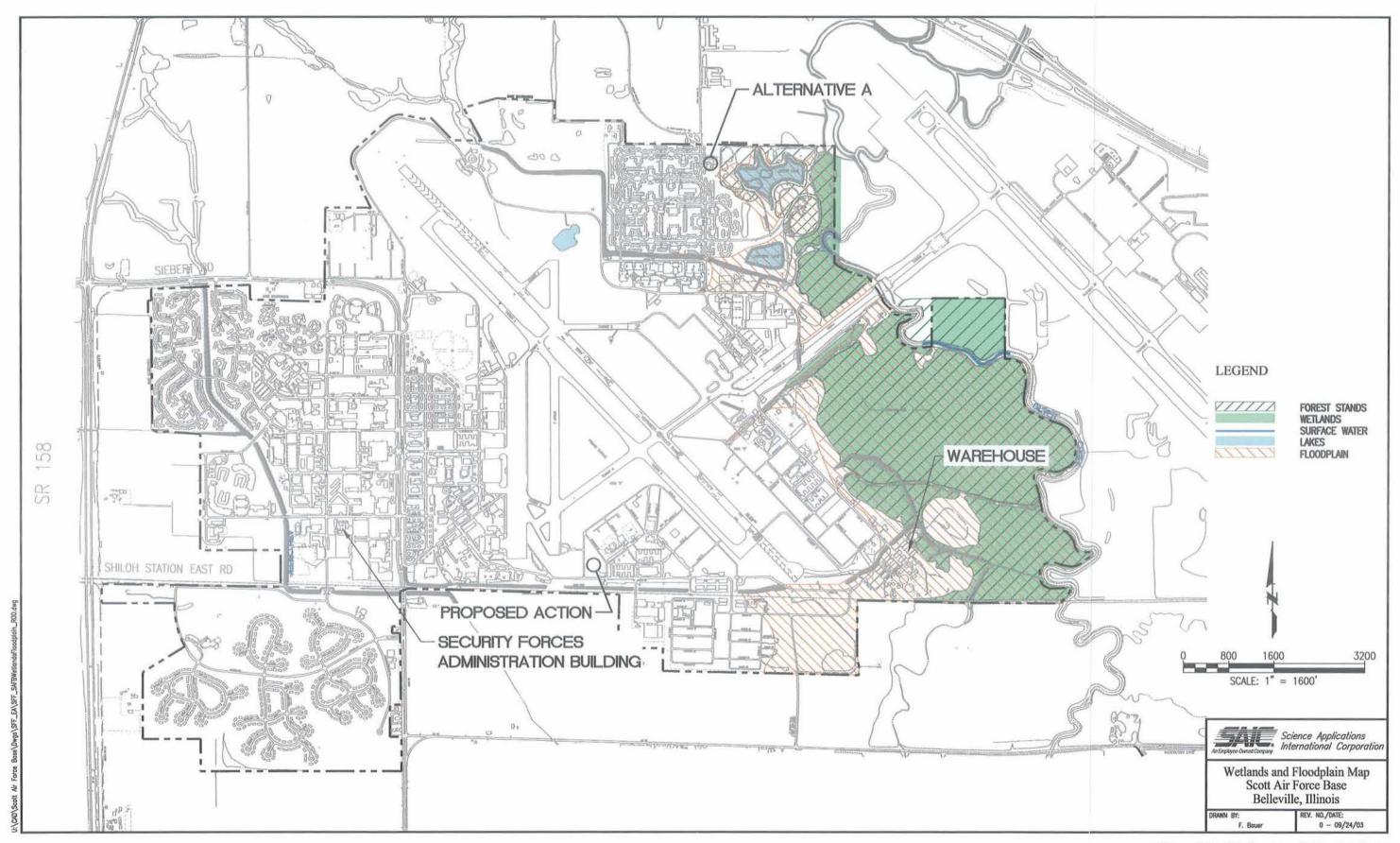


Figure 3-2. Wetlands and Floodplain Map

## 3.7 SOCIOECONOMIC RESOURCES

Socioeconomic resources are described in this section using demographic and employment measures, which are key factors influencing housing demand, education needs, and infrastructure requirements. Implementation of the Proposed Action or Alternative A would affect a relatively small number of personnel, and the socioeconomic impacts of the action would be confined primarily to the employment and income generated from construction activities.

The Location and Region of Influence (ROI) for the Proposed Action and Alternative A is Scott AFB, located in St. Clair County, Illinois, approximately 20 miles east of the City of St. Louis, Missouri. The base covers approximately 2,500 acres and is located in a predominantly agricultural area. The base is immediately south of Interstate Highway 64, near the cities of O'Fallon and Belleville (Figure 1-1). The socioeconomic ROI for an analysis of this type is generally defined by the residence patterns of current installation personnel, the number of personnel associated with the action under consideration, and the value of any construction associated with the action. The cost of the Proposed Action or Alternative A is projected at approximately \$7.7 million. Construction firms and workers are expected to originate from O'Fallon, Illinois or other regions surrounding Scott AFB.

The population of St. Clair County in 2000 was 256,599 (US Census Bureau). There are approximately 11,000 persons employed by Scott AFB (8,100 military, 2,800 civilians) and an estimated 8,500 military retirees in the area who use Scott AFB services (Woolpert, 2002). The total Scott AFB community, on- and off-base, comprises approximately 30,900 military and civilian personnel and their families (Woolpert, 2002).

#### 3.8 CULTURAL RESOURCES

Historical and cultural resources are protected under the *National Historic Preservation Act* (16 USC 470a-470w), Executive Order 11593, *Protection and Enhancement of the Cultural Environment*, the *Archaeological and Historic Preservation Act* (16 USC 469-469c), the *Historic Sites Act* (16 USC 461-467), and the *Illinois State Agency Historic Resources Preservation Act*. Federal agencies must provide an opportunity for comment and consultation with the Illinois Historic Preservation Agency and the Advisory Council on Historic Preservation when an action has the potential to affect historic or cultural sites. AFI 32-7065, Cultural Resources Management, must be complied with as well.

The National Park Service conducted an archeological assessment of Scott AFB in 1992. Archeological potentials for the site of the Proposed Action and Alternative A are identified as being "highly disturbed" (Figure 3-3) and as having "an extremely low potential for the identification of additional cultural resources."

Based upon an archival search for the sites of the Proposed Action and Alternative A, no historical resources, e.g., historical buildings, archeological sites, or monuments, were identified (Figure 3-4).

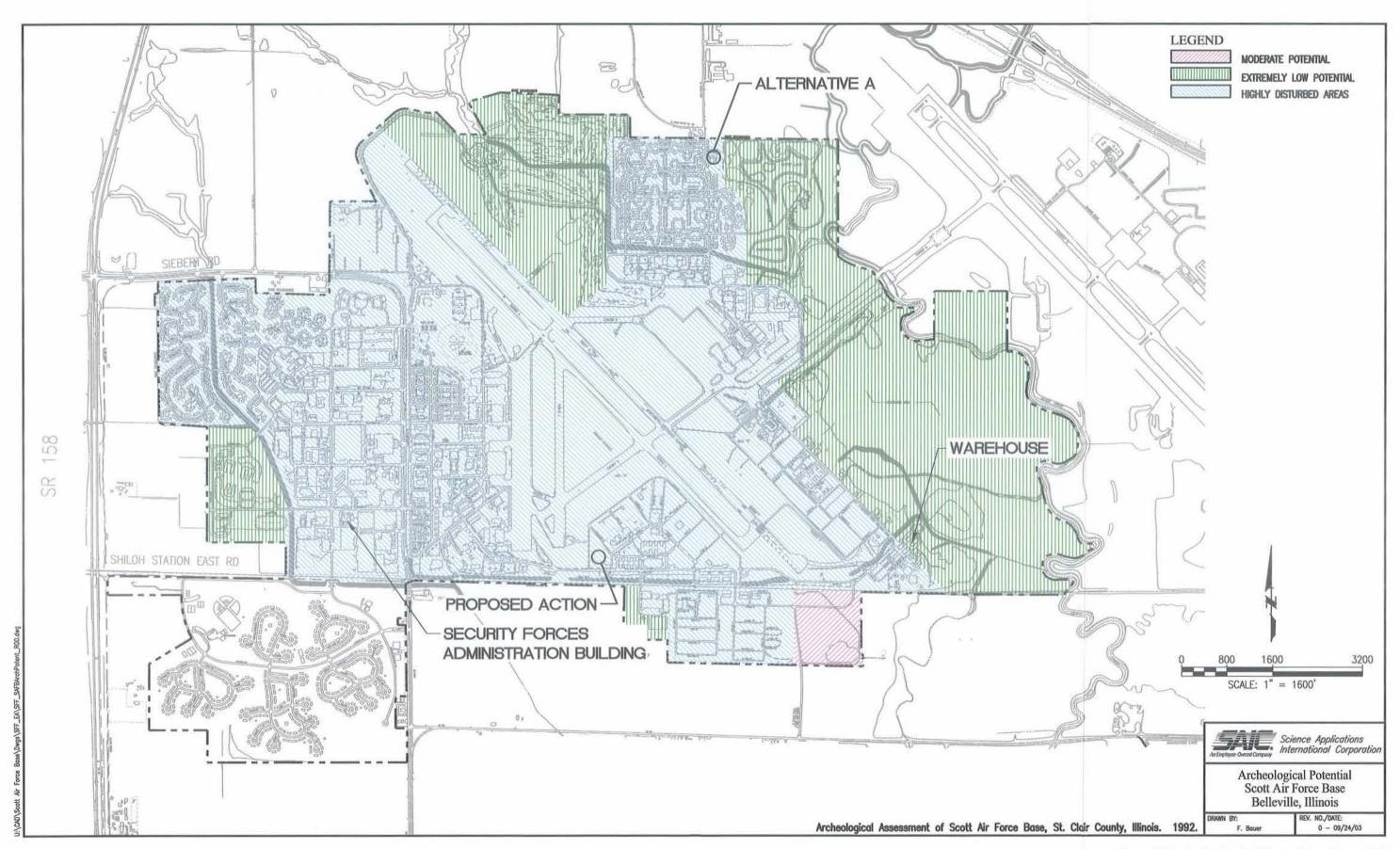


Figure 3-3. Archeological Potential at Scott Air Force Base

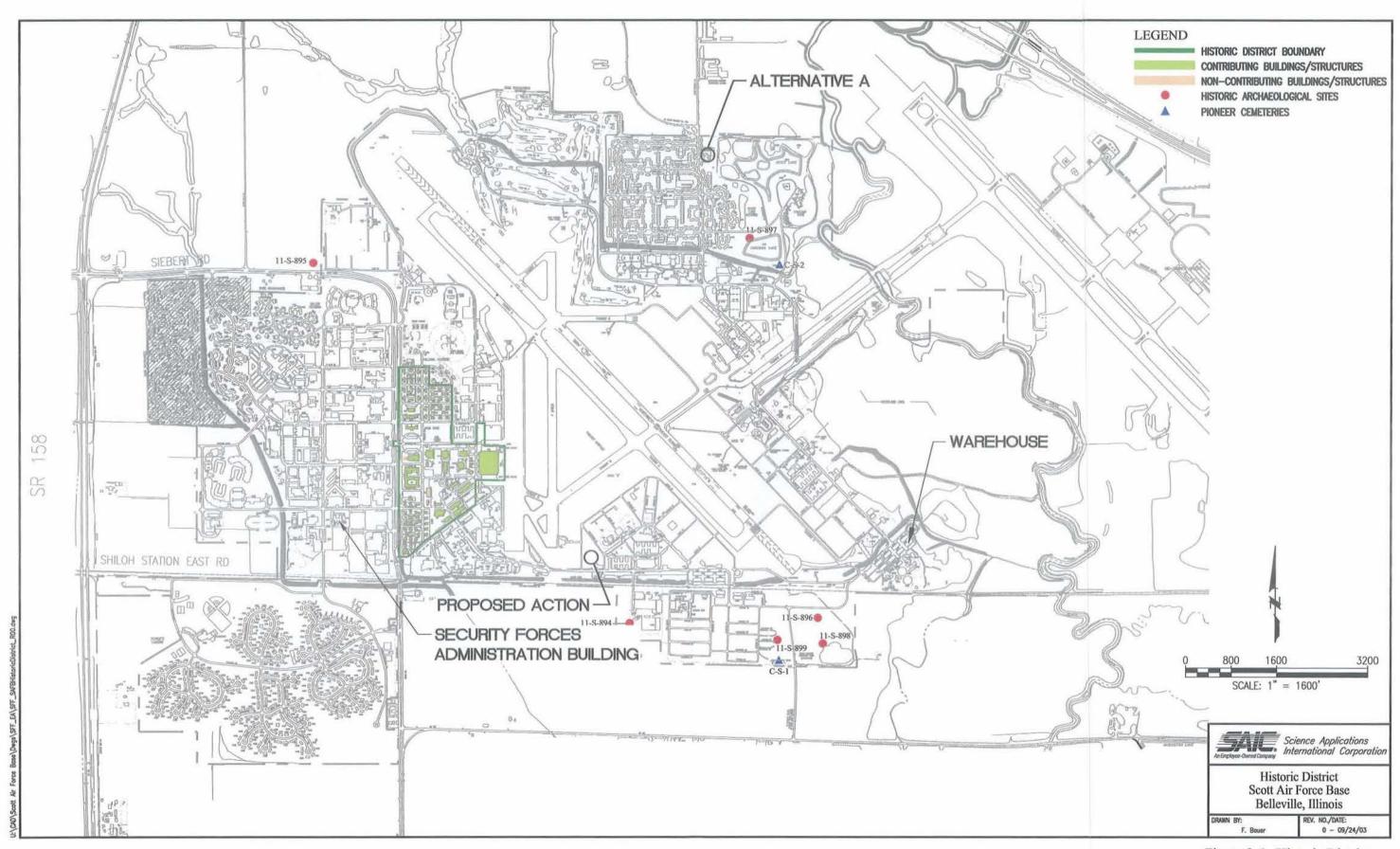


Figure 3-4. Historic District

Building 1907 serves as the main administrative building for the Security Forces Squadron. This building was constructed in 1953 and is scheduled for demolition as part of the Proposed Action and Alternative A. A review of the Thomason and Associates' *Inventory and Evaluation of Historic Buildings* indicated that Building 1907 does not meet the requirements for a historic building.

Building 3276 currently serves as the main warehouse facility for the Security Forces Squadron. The building was constructed in 1941 and is scheduled for demolition as part of the Proposed Action and Alternative A. A review of the Thomason and Associates *Inventory and Evaluation of Historic Buildings* indicated that Building 3276 does not meet the requirements for a historic building.

#### 3.9 LAND USE

Originally, the land in the vicinity of Scott AFB was vegetated by tall grass prairie and mixed hardwood forest. Before it was acquired by the government, the primary land use was agriculture. Since that time, land management has included construction sites, residential and commercial use and permanent mowed turf grass (INRMP, 2002). Land use at the sites of the Proposed Action and Alternative A consists of mowed turf grass. Land use in the immediate vicinity of Alternative A also includes an existing asphalt parking area. The BGP classifies buildings in the vicinity of the Proposed Action as administrative (Woolpert 2002). Land use immediately adjacent to the Proposed Action includes the following:

North - Building 751, (Communication Station), Taxiway G

East - Building 741, (Education Facility)

South - South Drive, (Veterans Clinic)

West - Building 742, (Fuels Facility)

Land use surrounding the Alternative A site was previously part of the Cardinal Creek Housing area. The current land use is classified as open space (Figure 3-5). A recently constructed dog kennel is adjacent to the Alternative A site. Land use immediately adjacent to the Alternative A location includes the following:

North - Agricultural

East - Scott Lake

South - Vacant Land, (Former Housing)

West - Vacant Land, (Former Housing)

#### 3.10 TRANSPORTATION SYSTEMS

Vehicular traffic in the vicinity of the Proposed Action is generated from all types of activities conducted at Scott AFB. Semi-trailer trucks, construction vehicles, buses, and government and privately owned vehicles pass by the area on an intermittent/daily basis. Although traffic passes by this site daily, traffic congestion is not anticipated to be a problem with the implementation of the Proposed Action. Due to the open space, land use, and the general lack of traffic in the vicinity of Alternative A, traffic congestion at Alternative A is limited.

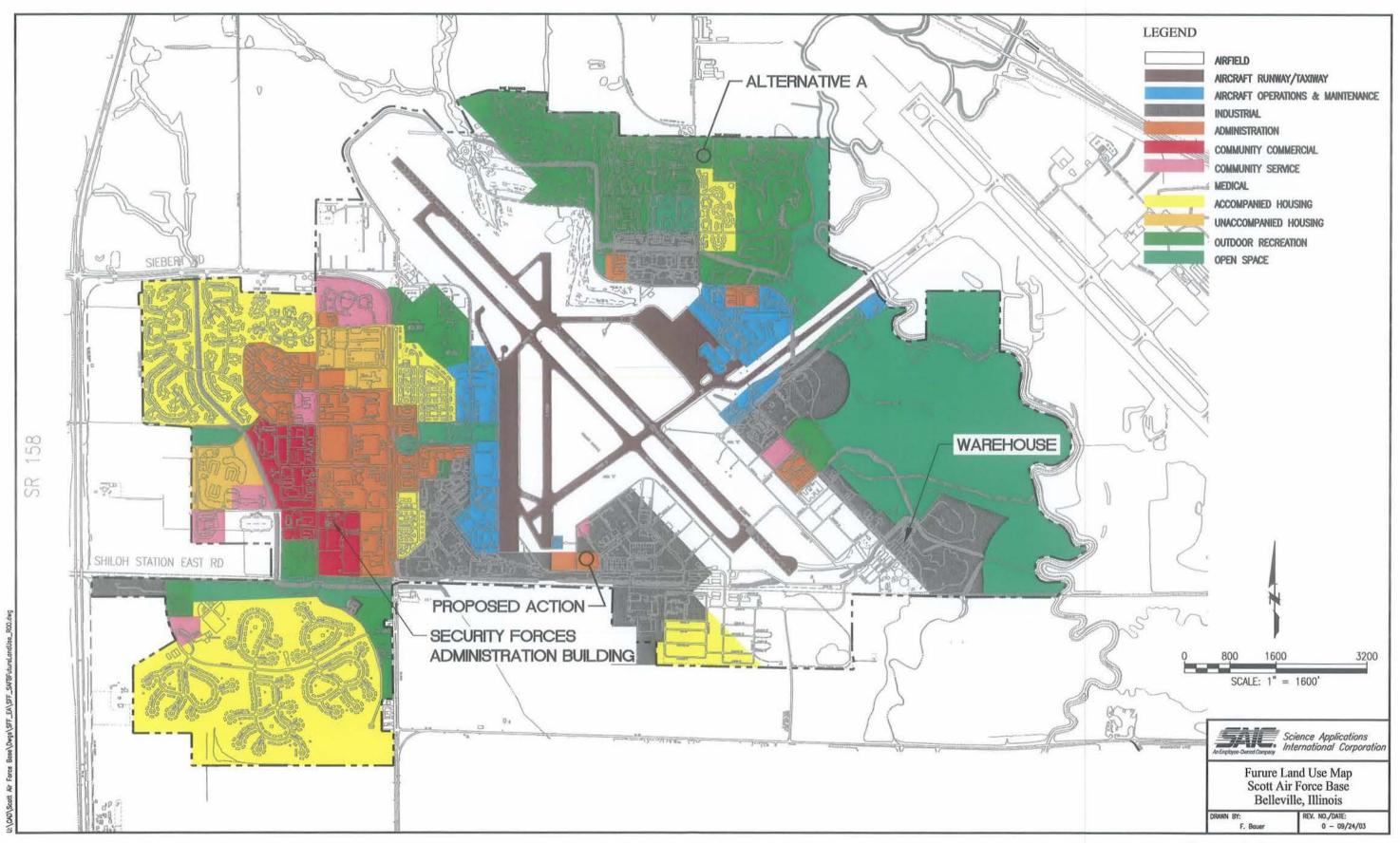


Figure 3-5. Future Land Use Map

#### 3.11 AIRSPACE/AIRFIELD OPERATIONS

Based upon the Operational Constraints map included in the BGP (Figure 3-1), the construction areas involved with the Proposed Action and Alternative A are not located in an airspace or an airfield operations area. Unified Facilities Criteria (UFC) 3-260-01 (formerly AFI 32-1123) states that to meet specific airspace/airfield operations criteria, construction must be more than 1,000 feet from the runway centerline, and constructed structures should be under a 7:1 ratio from the 1,000-foot line. The UFC also states that new facilities must be constructed at least 125 feet from the edge of all existing aircraft parking aprons to meet the apron clearance criteria specified in UFC 3-260-01. The sites for both the Proposed Action and Alternative A comply with these standards.

The Security Forces warehouse (Building 3276) is located within the southern clear zone for airfield operations. The clear zone, which is located closest to the runway ends, has a high potential for aircraft accidents. The construction and use of Building 3276 pre-dates the Air Force clear zone criteria. Buildings located within the clear zone require a waiver for continued use. The construction of the SFOF would allow for the transfer of the Security Forces Squadron's equipment to the new facility and the demolition of Building 3276.

# 3.12 SAFETY AND OCCUPATIONAL HEALTH

Factors involving primary occupational safety and health issues are addressed in 29 CFR Occupational Safety and Health Standards. The Department of Labor administers these regulations, which are applicable at construction sites and buildings at Scott AFB. If either the Proposed Action or Alternative A are implemented, all applicable provisions of the Corps of Engineers Manual EM 385-1-1, "General Safety Requirements," must be followed. Additionally, OSHA's final steel erection standard went into effect January 18, 2002 (Federal Register, July 17, 2001).

There are no safety and occupational health issues related to the Proposed Action or Alternative A.

# 3.13 ENVIRONMENTAL MANAGEMENT, POLLUTION PREVENTION

The United States Air Force (USAF) recognizes the importance of pollution prevention (P2) in protecting the environment, achieving compliance objectives, and reducing waste disposal costs. Such successful P2 programs as recycling, waste minimization, product substitution, and process changes, among others, are planned or underway at Air Force installations worldwide. The Air Force's environmental programs must do more today than ever before, and with increased cost-effectiveness.

Most tenant activities at Scott AFB participate in the recycling program. If the Proposed Action or Alternative A were implemented, the selected contractor would participate as well. All ferrous and non-ferrous metals from the project must be recycled. The contractor would also recycle general administrative refuse associated with this project. This refuse may include cardboard, mark 1 and 2 plastic bottles, metals, glass, aluminum and steel cans, and mixed paper.

3-12 FINAL

All recyclable material must be turned into the Base Recycling Center located at Building 3286. Hours of operation are 0730 to 1500 Monday through Friday and 0730 to 1100 on Saturdays.

#### 3.14 GEOLOGY AND SOILS

Pennsylvanian bedrock underlies Scott AFB at a depth of approximately 85 feet. Underlying the Pennsylvanian bedrock is the Chesterian Series sandstone. There are no geologic outcrops at Scott AFB. Soils in the vicinity of the Proposed Action are described as Virden silt loam with a 0-3 percent slope. Soils in the vicinity of Alternative A are described as Bethalto silt loam with 0-2 percent slope. Soils at the sites of the Proposed Action and Alternative A have been highly disturbed by previous development.

## 3.15 ENVIRONMENTAL JUSTICE

St. Clair County is a large, demographically diverse county, with communities ranging from urban areas of East St. Louis and Belleville to small rural towns east and west of Scott AFB. The year 2000 population of St. Clair County was approximately 67.9 percent Caucasian and 34.3 percent minorities, with the predominant minority described as African-American; 2.2 percent of the county's population is considered Hispanic. There are no low-income or minority disadvantaged populations in the area of the Proposed Action or Alternative A.

#### 3.16 INDIRECT AND CUMULATIVE IMPACTS

The portion of Scott AFB in which the Proposed Action and Alternative A are located is considered to be an improved area that is highly disturbed. There are no known indirect or cumulative impacts associated with the Proposed Action or Alternative A.

3-13 FINAL

# 4.0 ENVIRONMENTAL CONSEQUENCES

#### 4.1 INTRODUCTION

Environmental consequences of the Proposed Action, Alternative A, and the No-Action Alternative are addressed in this section. The Proposed Action would include new construction located near South Drive and Washington Street. Alternative A would include new construction at the Cardinal Creek Gate, adjacent to Pryor Drive. The No-Action Alternative includes taking no action to improve the existing Security Forces Facilities, thereby remaining status quo.

The analysis process determines the consequences of each action and the anticipated impact(s) that the action could have, if implemented. The Proposed Action, Alternative A, and the No-Action Alternative could generate no impact to environmental issues, or encompass environmental consequences that may fall into the categories described in Table 4-1.

Table 4-1 Description of Environmental Consequences

Short-term	effects caused during the construction and/or initial operation of the action	
Long-term	effects caused after the action has been completed and/or the action is in full and complete operation or effects of the action if not approved	
Irreversible	those effects caused by the proposal that cannot be reversed	
Irretrievable	effects caused by an alternative that change outputs or commodities (e.g. trees, cattle, hiking, fishing) of land's use <i>and</i> must be reversible	
Positive	constructive, progressive effects	
Negative	harmful, destructive, unsafe, risky	
Minor	trivial, irrelevant, inconsequential	
Major	vital, primary, important	
Adverse	unfavorable, undesirable, harsh	
Direct	caused by the action and occur at the same time and place	
Indirect	caused by the action and effects occur later in time or farther removed in distance, but reasonably foreseeable	
Cumulative	nonrelated actions that have, are, or probably would occur in the same locality	

A significant impact, as it applies to NEPA, requires considerations of both context and intensity. The following descriptions are brief and do not cover all aspects of the terminology. Context means that the significance of an action must be analyzed in several arenas, such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the Proposed Action. Intensity refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. Impacts may be both beneficial and adverse. Intensity also includes the degree to which the Proposed Action and alternatives affect public health or safety. A summary table of the environmental resources that are determined to be impacted by the Proposed Action, Alternative A, and the No-Action Alternative is provided in Section 4.18.

# 4.2 AIR QUALITY

# 4.2.1 Proposed Action and Alternative A

A conformity determination would not be required, as the total of direct and indirect emissions from construction activities at the site of the Proposed Action or Alternative A are below de minimus thresholds specified at 40 CFR 93.153(b)(1). Specifically stated, implementation of the Proposed Action or Alternative A would not increase emissions over baseline emission levels. The statutory requirements of conformity are included in the CAA, section 176(c) and require the EPA to publish regulations requiring federal actions to conform to applicable state or federal implementation plans (SIPs or FIPs) to ensure that the actions do not interfere with strategies employed to attain National Ambient Air Quality Standard (NAAQS). The EPA proposed conformity regulations entitled Determining Conformity of General Federal Actions to State or Federal Implementation Plans. These were brought into effect on January 31, 1994. The intent of the conformity ruling is to ensure that federal actions do not adversely affect the timely attainment and maintenance of air quality standards. Air Force personnel and installation planners will need to analyze each Air Force action, in accordance with EPA regulation 40 CFR 93, to ensure conformity with the applicable SIP or FIP. The conformity analysis examines the impacts of the direct and indirect air emissions from a proposed Air Force action and determines whether the action conforms to the applicable SIP or FIP. The U.S. Air Force Conformity Guide will assist installation personnel in determining when and why Air Force actions must be analyzed for conformity with SIPs, who to consult, and how long the conformity process will take. Moreover, the Proposed Action or Alternative A would be in compliance with, or consistent with, all relevant requirements and milestones contained in the Illinois State Implementation Plan (SIP). Contractor(s) and subcontractor(s) of this project must comply with these regulations, including 42 USC 7418(a) (state and local requirements).

A short-term minor adverse increase in emissions from equipment and vehicles would occur during the construction phase of the Proposed Action or Alternative A, from transportation of refuse in open vehicles. Fugitive dust and particulate matter would be emitted into the air from access roads, stockpiles, embankments, and/or other work areas. Water sprinkling would be the preferred method of controlling fugitive dust, especially if a nuisance or road hazard due to fugitive dust particulate arises, or is anticipated due to windy or dry weather conditions.

#### 4.2.2 No-Action Alternative

There would be no impact to air quality issues if this alternative were selected.

## 4.3 NOISE

# 4.3.1 Proposed Action and Alternative A

Implementation of the Proposed Action or Alternative A would generate **short-term**, **minor adverse impacts** throughout the construction phase of the project. The amount of noise generated from construction and operational activities would be negligible and temporary. Allowing construction only during the hours of 0800-1700 could mitigate impacts due to

construction noise. Post-construction noise levels surrounding the SFOF would remain at preconstruction levels.

#### 4.3.2 No-Action Alternative

There would be no impact from noise-related issues if this alternative were selected.

# 4.4 WASTES, HAZARDOUS MATERIALS AND STORED FUELS

# 4.4.1 Proposed Action and Alternative A

The existing Security Forces buildings are expected to contain lead-based paint (LBP) and asbestos-containing materials (ACM). No impacts related to LBP or ACM are expected as long as building demolition incorporates proper safety precautions. Such precautions might include water spraying to reduce fugitive dust. Although no impacts associated with wastes, hazardous materials, or stored fuels are anticipated from the implementation of the Proposed Action or Alternative A, appropriate health and safety measures will be practiced to ensure that no impacts occur.

Asbestos Containing Materials, LBP, paints containing chromate, and/or transformers containing polychlorinated biphenyl (PCB) fluid are prohibited from use during implementation of the Proposed Action or Alternative A. Noncompliance could generate Notices of Violation for Scott AFB and legal action could be implemented against the accountable contractor.

The Contracting Officer, through the EMF, must approve all pesticide/insecticide applications at the proposed facility. A label and Material Safety Data Sheet (MSDS) of the pesticide/insecticide must be available for review. After treatment (if approved), the amount (meaning insecticide + water), percentage used (0.05%, 1.0%, etc.) of the pesticide/insecticide, and total square footage of treatment must be submitted to the EMF.

Hazardous materials such as petroleum products used during construction activities would be restricted and the generation of hazardous waste is not anticipated. If a contractor cannot avoid generating hazardous waste, the waste must be disposed of according to contract specifications and environmental laws. Improper usage of hazardous materials or disposal of hazardous wastes during construction activities could result in Notices of Violation from the IEPA, leading to possible fines and litigation.

#### 4.4.2 No-Action Alternative

There would be **no impact** to the environment from wastes or hazardous materials, if the No-Action Alternative were selected.

#### 4.5 WATER RESOURCES

# 4.5.1 Proposed Action and Alternative A

No short-term adverse impacts to surface water or groundwater quality are anticipated from the implementation of the Proposed Action or Alternative A. Review of FEMA flood maps, base

wetland maps, and an on-site preliminary survey indicated that no floodplains or wetlands were present at the sites of the Proposed Action or Alternative A. As a result, both alternatives would have **no impact** to existing wetlands or floodplains. All appropriate measures and best management practices (BMP) would be taken during construction activities to minimize erosion and control sedimentation.

#### 4.5.2 No-Action Alternative

There would be no impact to surface water, groundwater, wetlands, or floodplains if this alternative were selected.

## 4.6 BIOLOGICAL RESOURCES

## 4.6.1 Proposed Action and Alternative A

No adverse impacts to biological resources are anticipated from implementation of the Proposed Action or Alternative A.

#### 4.6.2 No-Action Alternative

No impact to biological resources would result from the implementation of this alternative.

## 4.7 SOCIOECONOMICS

# 4.7.1 Proposed Action and Alternative A

Short-term positive impacts for the construction industry and local economy are anticipated from implementation the Proposed Action or Alternative A. Construction of a new facility in which the Security Forces Squadron can store equipment protected from the elements will have a long-term positive impact on the cost of replacing equipment. The construction of the new SFOF is not intended to create additional long-term employment at the base and as such there would be no impact to housing demands, populations, or educational needs, if the Proposed Action or Alternative A were implemented.

#### 4.7.2 No-Action Alternative

There would be an unavoidable **short-term**, **negative impact** associated with the loss of manhours that have been applied for design and preparation of the Proposed Action or Alternative A. Monetary resources (Defense Energy Support Center [DESC] funds) could be reallocated for other DESC projects.

There would be a **long-term negative impact** to socioeconomics if the No-Action Alternative were implemented. The existing conditions of the Security Forces Squadron administration and warehouse facilities are below the standard required for the Squadron to efficiently carry out its required mission. The inefficiencies create workarounds that lower the overall productivity of Security Forces personnel and increase the overall costs of accomplishing daily tasks. In addition, the existing warehouse does not have adequate spacing to accommodate the Squadron's

required equipment. This lack of space results in the equipment being exposed to the elements, there by reducing the useful life of the equipment.

## 4.8 CULTURAL RESOURCES

## 4.8.1 Proposed Action and Alternative A

No impacts are anticipated from implementation of the Proposed Action or Alternative A; however, the discovery of an artifact or historical object would require all construction activities to cease until the Cultural Resource Specialist and/or the Base Historian is notified. Construction activities must not proceed until the aforementioned personnel provide approval. Archeological resources on either public or Native American lands cannot be excavated, removed, damaged, or otherwise altered without a permit (32 CFR 229.4(a)(5)(b)) and approval from the Cultural Resources Specialist at Scott AFB.

## 4.8.2 No-Action Alternative

There would be **no impact** to cultural and/or historical resources if the No-Action Alternative were selected. If construction does not occur, there would be no possibility of excavating any type of cultural resource, i.e. artifact, as part of this project.

### 4.9 LAND USE

## 4.9.1 Proposed Action and Alternative A

Construction of the new facility would involve the conversion of the current land use from a mowed turf grass area to a developed lot. This conversion would cause long and short term minor impacts to land use as both the Proposed Action and Alternative A sites were previously developed. The current and future land use, as described in the BGP for both alternatives, is compatible with the construction of a new facility.

#### 4.9.2 No-Action Alternative

There would be no impacts to land use if this alternative were selected.

## 4.10 TRANSPORTATION SYSTEMS

# 4.10.1 Proposed Action and Alternative A

Short-term minor increases in traffic are anticipated from construction vehicles, and could increase road hazards to the public during the construction phases of the Proposed Action or Alternative A. Construction traffic is anticipated to have a **short-term minor adverse impact** to the public, pending completion of the facility. Increases in traffic flow from daily activities at the sites of the Proposed Action or Alternative A would be negligible; **no long-term impacts** are anticipated.

## 4.10.2 No-Action Alternative

No impacts to transportation systems are anticipated if the No-Action Alternative were selected.

## 4.11 AIRSPACE/AIRFIELD OPERATIONS

## 4.11.1 Proposed Action and Alternative A

The Proposed Action and Alternative A are located outside of any airspace or airfield operations areas, and therefore **no impacts** to airspace or airfield operations are anticipated. However, **long-term positive impacts** would be realized with the implementation of the Proposed Action or Alternative A due to the removal of the non-compliance of the building within the clear zone.

## 4.11.2 No-Action Alternative

As was described in Section 3.11 the existing Security Forces warehouse (Building 3276) is located within the southern clear zone of the airfield. The presence of these buildings in the clear zone presents an ongoing non-compliance with clear zone regulations. The building currently remains in place due to a waiver that exempts the structures from clear zone regulations. Implementation of the No-Action Alternative would leave this structure in place and would result in **minor long and short-term negative impacts**.

## 4.12 OCCUPATIONAL SAFETY AND HEALTH

# 4.12.1 Proposed Action and Alternative A

Construction of the Proposed Action or Alternative A would result in a long-term improvement in safety. Construction of the expanded facility would provide an environmentally controlled space that would allow workers to maintain reasonable working hours and reduce the risk of heat-related injuries. Construction of a new integrated SFOF would allow the existing warehouse facility to be demolished. The demolition of the existing warehouse would remove a facility that is located in the clear zone of the airfield, thereby eliminating the risk of an aircraft accident occurring at the warehouse. These two factors would result in an overall long-term positive impact to Occupational Health and Safety as a result of the Proposed Action or Alternative A.

No impacts to occupational and construction workers are anticipated to occur with implementation of the Proposed Action or Alternative A, provided they comply with OSHA regulations and standards during construction activities.

#### 4.12.2 No-Action Alternative

Remaining status quo is anticipated to have both **long and short-term negative impacts** to the safety of personnel using the existing Security Forces warehouse facility. The impact is caused by the continuing lack of environmental controls and the risks associated with heat-related injuries.

## 4.13 ENVIRONMENTAL MANAGEMENT – POLLUTION PREVENTION

## 4.13.1 Proposed Action and Alternative A

In support of national environmental efforts, the contractor would recycle all ferrous and non-ferrous metals from the project. The contractor would also recycle general administrative refuse associated with this project. This refuse includes cardboard, mark 1 and 2 plastic bottles, glass, aluminum and steel cans, and mixed paper. The Base Recycling Center, Building 3286, on South Drive will accept these items Monday through Friday between 0730 and 1500 and Saturdays between 0730 and 1100. The use of 'green' products, reuse/recycling, and minimization of solid or hazardous waste would be encouraged during new construction activities at the sites of the Proposed Action or Alternative A as part of the newly enacted Affirmative Procurement Plan.

Implementation of the Proposed Action or Alternative A would have **no impacts** to pollution prevention or environmental management programs, provided the above guidelines are followed.

## 4.13.2 No-Action Alternative

If the No-Action Alternative were implemented, no construction activities would occur on site and **no impacts** to environmental management or pollution prevention programs would be anticipated.

#### 4.14 GEOLOGY AND SOILS

# 4.14.1 Proposed Action and Alternative A

Construction contractors will use erosion control measures consistent with the Natural Resources Conservation Service (NRCS) Illinois Urban Manual. Necessary measures and best management practices will be implemented to reduce soil erosion and siltation during construction. Interim measures to prevent erosion during construction would be implemented and could include the installation of staked straw bales, sedimentation basins, and temporary mulching. Proper grading would be accomplished to allow water to flow from the roadway and into the drainage system, rather than standing and eroding the shoulder or pavement edge. All construction areas will be mulched and seeded immediately upon completion of construction.

Phase I of the National Pollutant Discharge Elimination System (NPDES) storm water program presently covers discharges from large construction activities disturbing five acres or more of land. Phase II of NPDES storm water program covers small construction activities disturbing between one and five acres. Phase II became final on December 8, 1999, with small construction permit applications due by March 10, 2003. "Disturbance" refers to exposed soil resulting from activities such as clearing, grading, and excavating. Construction activities can include road building, construction of residential houses, office buildings, and industrial sites, and demolition. Implementation of the Proposed Action or Alternative A would disturb more than two acres of land and would therefore require a Phase II permit.

Implementation of the Proposed Action or Alternative have would have **no impact** to soils or geological resources, provided all of the aforementioned recommendations are applied.

## 4.14.2 No-Action Alternative

There would be **no impact** to geological resources or soils if the No-Action Alternative were selected since the proposed construction sites would remain undisturbed.

# 4.15 ENVIRONMENTAL JUSTICE

## 4.15.1 Proposed Action and Alternative A

There are no minority or low-income populations in the areas of the Proposed Action and Alternative A; therefore, Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, is not applicable.

Implementation of the Proposed Action or Alternative A would have **no impact** to minority or low-income populations.

## 4.15.2 No-Action Alternative

The No-Action Alternative would have no impact to minority or low-income populations.

## 4.16 INDIRECT AND CUMULATIVE IMPACTS

# 4.16.1 Proposed Action and Alternative A

There are no known indirect or cumulative impacts related to implementation of the Proposed Action or Alternative A.

## 4.16.2 No-Action Alternative

An indirect and cumulative impact is not anticipated under the No-Action Alternative.

#### 4.17 UNAVOIDABLE ADVERSE IMPACTS

# 4.17.1 Proposed Action and Alternative A

There are several short-term unavoidable minor adverse impacts summarized in Table 4-2 on the following page; however, there would be **no unavoidable long-term major adverse impacts** if the Proposed Action or Alternative A were implemented.

#### 4.17.2 No-Action Alternative

There are several short-term unavoidable minor adverse impacts summarized in Table 4-2; however, there would be **no unavoidable long-term major adverse impacts** if the No-Action Alternative were selected.

# 4.18 SUMMARY TABLE OF ENVIRONMENTAL CONSEQUENCES

Table 4-2 provides a summary of the potential environmental impacts of the Proposed Action and Alternatives.

Table 4-2 Comparison of Environmental Consequences

Environmental Resources	Proposed Action	Alternative A	No-Action Alternative Short-term – No Impact Long-term – No Impact	
Air Quality	Short-term – Minor Adverse Impact Long-term – No Impact	Short-term – Minor Adverse Impact Long-term – No Impact		
Noise	Short-term – Minor Adverse Long-term – No Impact  Short-term – Minor Adverse Long-term – No Impact		Short-term – No Impact Long-term – No Impact	
Socioeconomics			Short-term - Negative Impact Long-term - Negative Impact	
Land Use	Short-term – Minor Impact Long-term – Minor Impact Long-term – Minor Impact		Short-term – No Impact Long-term – No Impact	
Transportation Systems			Short-term – No Impact  Long-term – No Impact	
Airspace/Airfield Short-term - No impact Shor		Short-term – No Impact Long-term – Positive Impact	Short-term - Negative Impact Long-term - Negative Impact	
Occupation Safety and Health			Short-term - Negative Impact Long-term - Negative Impact	
Unavoidable Adverse Impacts			Short-term – Minor Adverse Impact Long-term – No Impact	

<sup>\*</sup>Environmental resources having no impact have been excluded from this matrix.

## 5.0 REFERENCES

- Byrd, Carolyn. Personal communication. August 29, 2003.
- Code of Federal Regulations, 14 CFR FAR, Part 150, Airport Noise Compatibility Planning.
- Department of the Air Force, Headquarters 375<sup>th</sup> Airlift Wing Air Mobility Command Scott AFB Illinois. *Integrated Natural Resources Management Plan for Scott AFB*. 2002.
- Engineering Science Inc., Installation Restoration Program Phase I, Atlanta. April 1985.
- ERM (Environmental Resources Management), Installation Restoration Program Stage I Remedial Investigation/Feasibility Study, Vol. I, draft report prepared by Headquarters Military Airlift Command, Scott Air Force Base, Illinois, Exton, Pennsylvania. 1989.
- Federal Emergency Management Agency. Flood Insurance Rate Map. St Clair County, Illinois. 1985.
- Federal Interagency Committee on Wetland Delineation. 1989.
- National Park Service, Interagency Archeology Services, Archeological Assessment of Scott Air Force Base, St. Clair County, Illinois. 1992.
- Thomason and Associates, Inventory and Evaluation of Historic Buildings and Structures on Scott Air Force Base, Illinois. June 1992.
- USAF Headquarters Military Airlift Command, Scott AFB, Illinois. Final Environmental Impact Statement for Joint Military-Civilian Use of Scott Air Force Base, Illinois, Vol. 1, Impacts Analysis. July 1991.
- U.S. Army Cops of Engineers, Omaha District. Final Multi-Site Preliminary Assessment/Site Investigation for Scott AFB, Illinois. October 1995.
- U.S. Army Engineer Research and Development Center. Environmental Laboratory. *Draft Environmental Assessment of Selected Fauna and their Habitats at Scott AFB Illinois: Bat Surveys, Seasonal Avian Inventories, and Botanical Survey of Forested Areas.* Vicksburg, Mississippi. Dec. 2001.
- U.S. Bureau of Census, Census of Population and Housing. Population data. 1990.
- US Census Bureau; St. Clair County QuickFacts
  wysiwyg://11/http://quickfacts.census.gov/qfd/states/17/17163.html> 2003.
- U.S. Department of Agriculture, Soil Conservation Service. Soil Survey of St. Clair County, Illinois. Illinois. Oct 1978.
- Woolpert LLP, Scott Air Force Base General Plan. Dayton, Ohio. May 2002.

# 6.0 LIST OF PREPARERS

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Ms. Carolyn Byrd 375 CES/CEV

Scott AFB, IL (618) 256-2092 APPENDIX A DD FORM 1391

1. COMPONENT AIR FORCE	PY 2003 MILITARY CONSTRUCTION PROJECT DATA (computer generated)					2. DATE
3. INSTALLATION AN SCOTT AIR FORCE BA				ROJECT TI	TLE ES OPERATIONS	PACILITY
5. PROGRAM ELEMENT 28047	6. CATEGORY CODE 730-835	T		8. PROJECT COST (\$000)		
	9. cog	T ESTIMA	TES			
	TTEM	T	I/M	QUANTITY	UNIT	COST
(2) SECURITY POLICE OPE (2) SECURITY POLICE AT/FP PHYSICAL SEC SUPPORTING FACILITI UTILITIES PAVEMENTS SITE INPROVEMENTS DEMOLITION	OPERATIONS UIRTY MEASURES ES		LS SM SM LS LS LS	3,150 3,150	1,703 24	5,440 ( 5,364 ) ( 76 ) 1,525 ( 433) ( 532) ( 343) ( 67)
OTAL REQUEST (ROUN	0 %) FION AND OVERHEAD (	5.7 %)	LS		-	( 150) 6,965 348 7,313 417 7,730 7,700 ( 582.0 )

10. Description of Proposed Construction: A one story masonry facility built on reinforced concrete slab with brick veneer exterior treatment, sloped raised seam metal roof system, mechanical equipment room, storage area, lighted parking, landscaping, and all utilities and necessary support associated with project. Included is security and Fire detection/ suppression systems. AT/FP physical security IAW DOD minimum standards.

Air Conditioning: 200 KW.

11. REQUIREMENT: 3,150 SM

ADEQUATE: 0 SM

SUBSTANDARD: 2,329 SM

PROJECT: Construct a security forces operations facility. (Current Mission) REQUIREMENT: Provide a facility capable of consolidating and supporting the Seucrity Forces mission to improve the efficiency and effectiveness of the operations. CURRENT SITUATION: The 375 Security Porces Squadron operates at two segregated

locations on the installation. Readiness equipment to support nine unit type code requirements and mission support supplies are stored in a 1941 WWII facility that lacks the necessary mechanical systems. Workers are forced to adjust their work schedule to compensate for the lack of environmental control, sometimes working from 0400 to 1200 to avoid the heat. This faiclity needs to be demolished. The main administrative facility constructed in 1953, does not meet the needs of the squadron. Secuirty Forces Personnel must escort prisoners to the base gym for exercise because the confinement area does not have the required area. This draws manpower away from the prisoners unit. The existing interview room currently doubles as a detention call for prisoners, who often cause damage to the room. The confinement cells are located such that prisoners must be led through the administrative and customer service areas of the building and directly

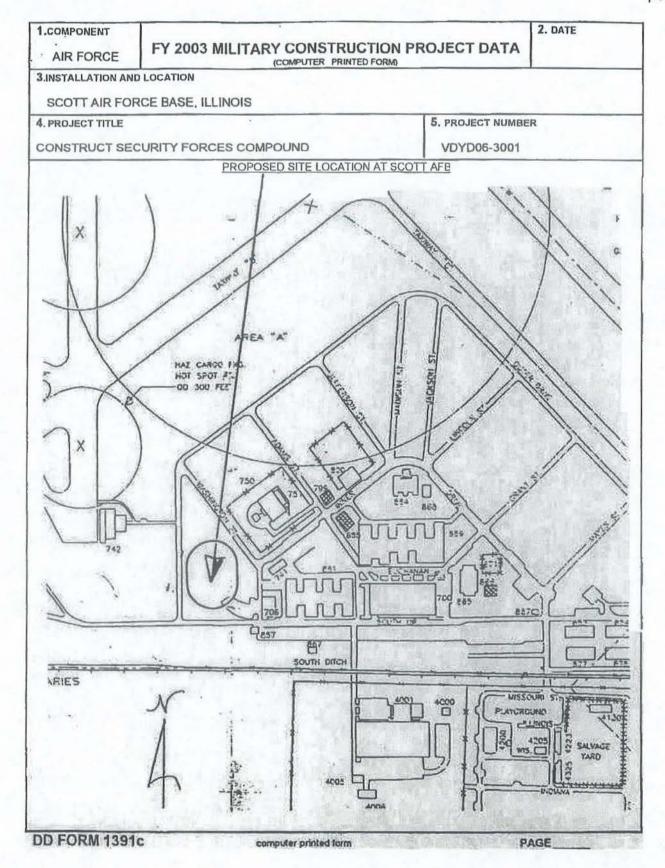
1. COMPONENT AIR FORCE	FY 2003 MILITARY CONSTRUCTION PROJECT DATA (computer generated)			
3. INSTALLATION SCOTT AIR FORCE	out and a second	4. PROJECT : SECURITY FOR	TITLE RCES OPERATIONS FACILITY	
5. PROGRAM ELEME 28047	NT 6. CATEGORY CODE 730-835	7. PROJECT NUMBER VDYD063001	8. PROJECT COST (\$000) 7,700	

across from the office of investigations, causing potential encounters between prisoners and their victims and/or witnesses. The poor state of facilities and lack of requirements for the Security Forces Squadron has forced the personnel to develop many work-arounds and has decreased the effectivenss of operations.

IMPACT IF NOT PROVIDED: Daily operations of the 375th Security Forces Squadron will continue to be hindered, and costly work-arounds will continue, due to the effects of inadequate facilities. The unit's ability to rapidly support Aerospace Expeditionary Force Requirements with properly equipped unit type codes will deteriorate as equiment continues to be exposed to the elements. The health and welfare of the military working dogs will continue to be at risk.

ADDITIONAL: An economic analysis has been prepared comparing alternatives of new constructin, revitalization, and status quo. Based on the present value and benefits of the respective alternatives, new construction was found to be the most cost-effective over the life of the project. This projects meets the criteria/scope specified in Air Force Handbook AFI 32-1084 "Facility Requirements". Cost calculations for this project were accomplished using the Air Force Pricing Guide. Mission requirements, operational considerations, and location are incompatible with use by other components. BCE: Lt Col Cawthorn (618)256-2701.

I. COMPONENT	FY 2003 MI	(computer ge	UCTION PROJECT	r DATA	2. DATE	
	N AND LOCATION		4. PROJECT			
SCOTT AIR FORC	E BASE, ILLINOIS		SECURITY FO	DRCES OPERATIO	NS FACILITY	
5. PROGRAM ELEMENT 6. CATEGOR					PROJECT COST (\$000)	
28047	730-	835	VDXD063001		7,700	
12. SUPPLEMENT	AL DATA:					
a. Estimated	Design Data:					
(1) Status	1:					
The same of the sa	e Design Started					
(b) Par	rametric Cost Estim	ates used to	develop costs		YES	
The second second	cent Complete as o	£ 01 JAN 200	2			
	e 35% Designed					
	s Design Complete					
(f) Ene	ergy Study/Life-Cyc	le analysis w	as/Will be per	ioimed	NO	
(2) Basis:						
(a) Sta	andard or Definitiv	e Design -			MO	
(b) Whe	re Design Was Most	Recently Use	1 -			
(3) Total	Cost (c) = (a) + ()	o) or (d) + (e	a):		(\$000)	
	duction of Plans a				MASS - 124	
(b) All	Other Design Cost	В				
(c) Tot						
(d) Con						
(e) In-	house					
(4) Constr	uction Contract Awa	ard				
(5) Constr	uction Start					
(6) Constr	uction Completion					
* Indicate	s completion of Pro	oject Definit:	lon with Param	etric Cost Est	timate	
which is	comparable to trac	ditional 35%	design to ensu	re valid scope	2,	
	executability.			±100		
	CONTRACTOR OF THE PARTY OF THE					
b. Equipment	associated with the	his project p	covided from o	ther appropria	ations:	
		PROCUE		CAL YEAR ROPRIATED	COST	
EQUIPMENT	NOMENCLATURE	APPROPR		REQUESTED	(\$000)	
					582	

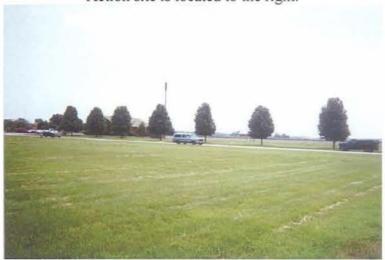


APPENDIX B SITE PHOTOGRAPHS

# Proposed Action



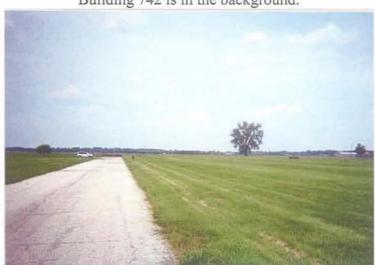
View looking south along Washington Road. The Proposed Action site is located to the right.



View from the north end of the Proposed Action site looking southeast.



View looking northwest at the site of the Proposed Action. Building 742 is in the background.



View looking north along the Outer Road.

# Alternative A



Existing dog kennel and adjacent property. The photograph was taking looking northeast.



Parking lot near the location of Alternative A facing north.



West side of the existing dog kennel. Mascoutah Gate is in the background.



View from existing parking lot looking west.